

**WHAT IS CLAIMED IS:**

1. An illumination device comprising a cylindrical light source and a curved mirror for reflecting light radiated from the cylindrical light source,

the curved mirror having a light reflection surface having a shape of a portion of an elliptic curve having a first focal point and a second focal point on a reference axis of the curved surface, in a cross-sectional surface perpendicular to the axial direction of the light source, and

the cylindrical light source being disposed on the reference axis at a position between the first focal point and the second focal point.

2. The illumination device according to claim 1,

wherein the distance L1 between the first focal point and a bottom point of the curved mirror is 1 to 40 mm; the distance L2 between the first focal point and the second focal point is 50 to 200 mm; the distance L3 between a light source center of the cylindrical light source and the bottom point of the curved mirror is 20 to 130 mm; and L3 is larger than L1, and the sum of L1 and L2 is larger than L3.

3. The illumination device according to claim 1,

wherein the length, regarding the cylindrical light source as a center, of the irradiated region where the variation in illuminance on the subject falls within  $\pm 1$  mW/cm<sup>2</sup> is not less than 1,000 mm.

4. An illumination device comprising a cylindrical light source and a curved mirror for reflecting light radiated from the cylindrical light source,

the curved mirror having a light reflection surface having a shape of a portion of a parabola having a focal point on a reference axis of the curved surface in a cross-sectional surface perpendicular to the axial direction of the light source, and

the cylindrical light source being disposed on the reference axis at a position between a bottom point of the curved mirror and the focal point.

5. The illumination device according to claim 4,

wherein the distance L4 between the focal point and the bottom point of the curved mirror is 40 to 200 mm; the distance L5 between a light source center of the cylindrical light source and the bottom point of the curved mirror is 5 to 50 mm; and L4 is larger than L5.

6. The illumination device according to claim 4,

wherein the length, regarding the cylindrical light source as a center, of the irradiated region where the variation in illuminance on a subject falls within  $\pm 1$  mW/cm<sup>2</sup> is not less than 1,000 mm.

7. A light irradiation apparatus comprising an illumination device according to claim 1.

8. A light irradiation apparatus comprising an illumination device according to claim 4.

9. A method for producing a photoreaction product sheet comprising irradiating a light to a photoreactive composition with an irradiation apparatus according to claim 7.

10. A method for producing a photoreaction product sheet comprising irradiating a light to a photoreactive composition with an irradiation apparatus according to claim 8.